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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/637,094	08/06/2003	Bruno Ghyselen	4717-6300	9064
28765	7590	09/19/2005		
WINSTON & STRAWN LLP 1700 K STREET, N.W. WASHINGTON, DC 20006			EXAMINER PHAM, THANH V	
			ART UNIT 2823	PAPER NUMBER
DATE MAILED: 09/19/2005				

Please find below and/or attached an Office communication concerning this application or proceeding.

Advisory Action Before the Filing of an Appeal Brief	Application No. 10/637,094	Applicant(s) GHYSELEN ET AL.	
	Examiner Thanh V. Pham	Art Unit 2823	

--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

THE REPLY FILED 02 September 2005 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.
 b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.

Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

NOTICE OF APPEAL

2. ☐ The Notice of Appeal was filed on _____. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

AMENDMENTS

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because
 (a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);
 (b) ☐ They raise the issue of new matter (see NOTE below);
 (c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or
 (d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: _____. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).
 5. ☐ Applicant's reply has overcome the following rejection(s): _____.
 6. ☐ Newly proposed or amended claim(s) _____ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).
 7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.
 The status of the claim(s) is (or will be) as follows:
 Claim(s) allowed: _____.
 Claim(s) objected to: _____.
 Claim(s) rejected: 1-20 and 23-26.
 Claim(s) withdrawn from consideration: _____.

AFFIDAVIT OR OTHER EVIDENCE

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).
 9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing a good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).
 10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

REQUEST FOR RECONSIDERATION/OTHER

11. ☐ The request for reconsideration has been considered but does NOT place the application in condition for allowance because: _____.
 12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08 or PTO-1449) Paper No(s). _____
 13. ☐ Other: _____.

Response to Amendment

1. Claim 18 is objected to because of the following informalities: the new status of the claim should be --Currently Amended--. Appropriate correction is required.
2. The amendment of claim 26 overcomes the objection of this claim.

Response to Arguments

3. Applicant's arguments filed 09/02/2005 have been fully considered but they are not persuasive.
4. Applicant contradicts himself by stating that "the claims require that, in a single step, the thickness of the very same layer that was measured be changed according to the results of its measurement." The actual step 105' of instant fig. 2 is not as that simple and includes four sub-steps: step 1051' of acquiring a measured thickness profile, step 1052' of deducing adjusting thickness specification to be applied, step 1053' of adjustment thickness and step 1054' of additional step. Those steps are not a single step as same as claimed in claim 1 and the steps in Vuong's fig. 2.
5. Applicant argues that the instant "Fig. 1 illustrates a prior art fabrication process, which is, incidentally, similar to that disclosed by Vuong". The examiner does not agree. The explanation is as in the above and further below.
6. Applicant argues that "neither these paragraphs specifically nor Vuong as a whole, in fact, disclose, explicitly or inherently, adjusting or changing the thickness of a

semiconductor layer according to a thickness adjustment specification as claimed.” And “fabrication process data or experience is not by itself changing a layer thickness”.

One cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In this instance, applicant attacks each and individual passage quoted in the rejection of the Final Office action and ignores the fact that Vuong, as a whole, discloses the instant invention.

Further, applicant is directed to step 398 of Vuong’s fig. 2 wherein “use results of profile and parameter selection for fabrication in cluster loop control” or Vuong’s paragraph [0054] wherein “the results of profile model and parameter selection are utilized for fabrication cluster feed-forward or feed-backward control loops. Details of this aspect are discussed in FIG. 6C”. Furthermore, the Vuong’s [0005], as a whole, teaches “knowledge of the dimensions of the gratings or periodic structures is essential in order to determine if the dimensions of the structure are within acceptable ranges”, this, in combination with the results of profile model and parameter (including the thickness as one dimension of the structure) “are utilized” or used in the fabrication cluster 1940. After the steps of measuring, comparing and selecting a profile (the same as the first three steps of claim 1), the results of profile model and parameter selection are utilized or used in changing a layer thickness, as one of the parameter variables, in the fabrication cluster (the same as the last step of claim 1).

7. Applicant also contradicts himself by stating that "claimed method is single, independent step that changes the thickness of the very same layer it is currently processing. No feedback or feed-forward information is provided to or received from any other process steps". The step of "comparing the measured thickness profile with stored standard profiles" is considered a feedback step where the measured thickness is feedback (to a 'computer') to be compared with stored data. How can a measured thickness is compared with stored standard profiles if not being ~~feed back~~ ^{fed back} to be compared? And the same with the step of "selecting a stored standard profile" plus "adjusting the actual thickness in accordance with the thickness adjustment specification" is considered the feed-forward step.

8. Applicant is wrong in the statement "[B]ut Vuong discloses here and throughout only a feedback or feedforward process ... for future wafers and cannot be used to change the thickness of the "complete wafer"". Applicant further recognizes: "Paragraph 96 states: "alternatively, the regression results may be used to adjust variables and/or physical controls of the fabrication process""; and then alleges: "This is no more than a hypothetical suggestion and not an actual disclosure of anything, much less of changing the thickness of a layer from which the regression results were obtained."

Applicant is directed back to the quoted passages in the Final office action, Vuong's [0072], wherein "several tasks may be concurrently or serially performed"; [0091], "in-line requests 1931 for the same data is transmitted from an optical metrology system 1930 ... The critical dimension data 1942 may be used by the fabrication cluster 1940 to adjust process variables of the fabrication process"; [0096], "the regression

Art Unit: 2823

results such as ... film thickness, and profile from the parameter selector ... may be used by a system user to fine-tune the ... fabrication process"; and therefore, "results may be used to adjust variables and/or physical controls of the fabrication process" in [0096], is, really/actually, a "suggestion" of Vuong that discloses/anticipates the instant claimed invention.


9. Applicant's statement "Profile models and "thickness adjustment specification" are entirely different data" is responded as in the above wherein the measured thickness is compared with the stored data from the parameter selector to select/adjust the process variables to get the better thickness adjustment specification to be performed or to fine-tune the film thickness, in the fabrication cluster as Vuong's anticipation.

10. The argument on Wolf is moot in view of Vuong as described in the Final rejection.

11. In view of the above, the rejections are maintained as in the Final Office action mailed 05/03/2005.

WP

09/12/2005


George Fourson
Primary Examiner